CHAPTER 8: SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

In accordance with the *National Environmental Policy Act* (NEPA) requirements, this section discusses the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity. It also examines long-term adverse cumulative impacts, with a focus on impacts that may narrow the range of options for future use. Impacts of the proposed action at the Lawrence Livermore National Laboratory (LLNL) are discussed in Section 5.1; unavoidable adverse environmental impacts are identified in Chapter 6.

Return of the Livermore Site to agricultural or other nonindustrial use may be precluded by the presence of the existing structures, roads, and utilities, and the existing soil contamination problems. Based on the general plans of the City of Livermore and the County of Alameda, both jurisdictions have designated these sites, as well as much of the surrounding area, for industrial uses. The long-term productivity of LLNL would be optimized by its continued use for research and design or as industrial facilities.

Because much of the land at Site 300 is undeveloped, it is conceivable that the site could be used for wind energy development or returned to an agricultural use, such as livestock grazing. The site could also be returned to an open area or wildlife refuge. These uses of the site would be compatible with existing Alameda and San Joaquin counties land use and applicable land use plans. However, it is possible that the remediation of contaminated areas and the protection of sensitive habitats would be required before such uses could take place.

Long-term cumulative impacts described above would be mitigated somewhat by a change to agricultural use. The LLNL contributions to future noise levels, traffic, and water consumption would be reduced.

The long-term benefits of continuing to operate LLNL must include fulfilling national defense missions, together with laser, biomedical, energy, education, and other research and development, and also including technology transfer to academia and industry. If LLNL were shut down and the properties were to return to other uses, for example agriculture or urban development, the short-term benefits of such a transfer would be different from the long-term loss to the Nation of a major technical research facility with diversified research, particularly in the fields of biomedicine, energy development, and national defense.

Environmental remediation activities currently occurring and scheduled to continue under the proposed action will, in the long term, improve the options for alternative uses of the Livermore and Site 300. Cleanup of the sites increases the options for future use of the property rather than narrowing it.